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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,893	06/20/2000	Jean-Rene' Lequepeys	034299-259	5767
7590 07/20/2005				
Thelen Reid & Priest LLP P O Box 640640 San Jose, CA 95164-0640			EXAMINER GHEBRETINSAE, TEMESGHEN	
			ART UNIT 2637	PAPER NUMBER

DATE MAILED: 07/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/595,893

Applicant(s)

LEQUEPEYS ET AL.

Examiner

Temesghen Ghebretinsae

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. It would be of great assistance to the Office if all incoming papers pertaining to a filed application carried the following items:

1. Application number (checked for accuracy, including series code and serial no.).
2. Group art unit number (copied from most recent Office communication).
3. Filing date.
4. Name of the examiner who prepared the most recent Office action.
5. Title of invention.
6. Confirmation number (See MPEP § 503).

This is non-final rejection with a new prior art. Examiner regrets for the delay of the examination.

### ***Specification***

2. The abstract of the disclosure is objected to because "Applied to digital communications and Fig.1 and fig.2" should be deleted. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 112***

3. Claims 1,8,12 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 8, "the N spread signals" lack clear antecedent basis.

In claim 8, line 4, "the data" lack clear antecedent basis.

In claim 12, line 7, "the transmitted data" lack clear antecedent basis.

In claim 19, line 3, "the spread code" lack clear antecedent basis.

### ***Claim Rejections - 35 USC § 103***

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mochizuki (6,320,842) in view of Nee (US2002/0186651).

6. Consider claims 1-4,8-15 as claimed. Mochizuki discloses data transmission process comprising at the transmission; means for divide in data into n data blocks (111); means for processing the n blocks in parallel in N  $\pi/2$  DBPSK and DPBSK modulation channels (112-1-112-4; 113-A-113-D), each modulating using a group of spread codes (PN1-PNN); means for combining (117-1,117-2) the output from the N parallel modulation and means for transmitting (118) the signal output from the means for combining. At the receiver; means for processing the received signal in parallel in N DBPSK and  $\pi/2$  DBPSK demodulation channel; and means for grouping the data together in series and reproduce the transmitted data (figs. 3,5,7,10).

Mochizuki differs from the claimed invention in that the modulation scheme is not M-ary orthogonal keying modulation scheme. However, Nee discloses means for divide in the data to be transmitted into N blocks (12,14); means for processing the bocks in parallel in N M-ary orthogonal keying modulation channel (16,18) and means for transmitting. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the M-ary orthogonal keying modulation scheme of

Nee in the system of Mochizuki since the system of Mochizuki is not limited to the specific modulation schemes.

As for claims 5-7,16-17, the number of spread codes (PN-1, PN-N) is the same in each group and the spread codes used are all different from one group to another (PN1-PN-N) and certain spread codes are used in several groups. (Code generator 59,14,116)

As for claims 18-19, at the reception the signal received is processed in group of filters (55-1-1,55-m-2; fig.2-3) distributed in N groups of filters.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Izumi et al (5,467,367) is cited to show a spread spectrum communication system comprising: means for divide in data into n data blocks; means for processing the n blocks in parallel in N modulation channels each modulating using a group of spread codes (PN1-PNN); means for combining the output from the N parallel modulation and means for transmitting the signal output from the means for combining. At the receiver; means for processing the received signal in parallel in N modulation channel; and means for grouping the data together in series and reproduce the transmitted data.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temesghen Ghebretinsae whose telephone number is

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571-272-3017. The examiner can normally be reached on Monday-Friday from 8 to 6.

The examiner can also be reached on alternate .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel, can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Temesghen Ghebretinsae  
Primary Examiner  
Art Unit 2637

T.G.

7/18/05.

TEMEGHEH GHEBRETINSAE  
PRIMARY EXAMINER